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Description: Few-fruited sedge is a grass-like, perennial herb of acidic peatlands that spreads via underground stems called rhizomes. Growing as tall as one meter, its stems are solitary or a shortly spaced apart, sometimes forming large colonies. Few-fruited sedge has tiny, wind-pollinated flowers that are borne in compact spikes at the summit of the stem. Each flower is unisexual, and is closely subtended by a small, flat scale that largely conceals it. The staminate (*i.e.*, pollen bearing) flowers are subtended by a single scale. The carpellate (*i.e.*, ovule bearing) flowers are subtended by two scales, an outer flat scale and an inner, sac-like scale, called a perigynium, that encloses the flower. In the few-fruited sedge, the uppermost spike bears only staminate flowers, while the one to three lower spikes bear only carpellate flowers.

Aids to identification: The few-fruited sedge belongs to a section of the genus *Carex* called the Vesicariae. Members of this section are characterized by three stigmas per flower (and subsequently three-sided achenes) and inflated perigynia, usually terminated by a two-toothed beak. Indeed, the perigynia of the few-fruited sedge do appear inflated, resembling small bladders with a slender beak at the apex. The beak is terminated by two tiny teeth that require magnification to see. As its name implies, the



Distribution in Massachusetts 1980-2006 Based on Records in Natural Heritage Database

Few-fruited Sedge

Carex oligosperma Michx.

State Status: **Endangered** Federal Status: None



Holmgren, Noel H. <u>The Illustrated Companion to Gleason and Cronquist's Manual</u>. NY Botanical Garden. 1998.

few-fruited sedge has relatively few carpellate flowers per spike (3–15) compared to closely related species. The leaves of this sedge are very narrow, only 1–3 mm wide, wiry, and are curled in at the edges (involute).

Similar species: There are several species in Massachusetts that resemble the few-fruited sedge. Two common and closely-related species that occur in wetlands include the sallow sedge (*Carex lurida*) and the inflated sedge (*Carex vesicaria*). Both have flat leaves that are usually wider than 3 mm, and they commonly have more cylindrical spikes than few-fruited sedge owing to the greater number of perigynia per spike. The Endangered Michaux's sedge (*Carex michauxiana*), which also can be found in acidic peatlands, superficially resembles the few-fruited sedge, but can be distinguished by its flat or M-shaped leaves and essentially uninflated, beakless perigynia.

Habitat: In Massachusetts, the few-fruited sedge occurs in both basin wetlands, such as bogs, and river/lake-side wetlands. Associated species include rhodora (*Rhododendron canadense*), three-way sedge (*Dulichium arundinaceum*), leatherleaf (*Chamaedaphne calyculata*), silvery sedge (*Carex canescens*), wool-grass (*Scirpus cyperinus*), swamp candles (*Lysimachia terrestris*), large cranberry (*Vaccinium macrocarpon*), and Virginia chain fern (*Woodwardia virginica*).

Population status in Massachusetts: Few-fruited sedge is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. This sedge is rare in Massachusetts because it is a cool-climate plant nearing the southern extent of its range; it is more abundant in the northern New England states. This sedge was once known from Connecticut, but is now believed to be historic or extirpated there.

Range: Few-fruited sedge occurs from Newfoundland, west to Alberta, south to North Carolina.

Threats: Threats to the few-fruited sedge are those that threaten the integrity of the natural communities it inhabits. These include changes in hydrology of the wetland (e.g., ditching, channelization, road construction) and invasive plant species such as common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*). These two species are capable of replacing native vegetation in wetlands due to abundant seed production and vigorous vegetative growth. Recognition and control of invasive species will be important for maintaining relatively pristine habitats for rare plant species.

Fruit Present:

	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
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Updated: October 2006